

=> fil hcaplus
 FILE 'HCAPLUS' ENTERED AT 10:33:54 ON 10 OCT 2006
 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
 PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
 COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 10 Oct 2006 VOL 145 ISS 16
 FILE LAST UPDATED: 8 Oct 2006 (20061008/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> d all hitstr tot

L101 ANSWER 1 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN
 AN 2005:299648 HCAPLUS
 DN 142:376493
 ED Entered STN: 07 Apr 2005
 TI Electrolyte solution and secondary lithium battery which uses the solution
 IN Nirasawa, Takao; Komaru, Atsuo
 PA Sony Corp., Japan
 SO Jpn. Kokai Tokkyo Koho, 23 pp.
 CODEN: JKXXAF
 DT Patent
 LA Japanese
 IC ICM H01M0010-40
 ICS H01G0009-038; H01M0004-38; H01M0006-16
 CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
 FAN.CNT 1

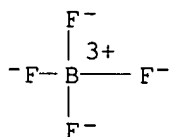
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005093237	A2	20050407	JP 2003-324947	20030917
PRAI JP 2003-324947		20030917		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2005093237	ICM	H01M0010-40
	ICS	H01G0009-038; H01M0004-38; H01M0006-16
	IPCI	H01M0010-40 [ICM,7]; H01M0010-36 [ICM,7,C*]; H01G0009-038 [ICS,7]; H01G0009-022 [ICS,7,C*]; H01M0004-38 [ICS,7]; H01M0006-16 [ICS,7]
	IPCR	H01G0009-022 [I,C*]; H01G0009-038 [I,A]; H01M0004-38 [I,A]; H01M0004-38 [I,C*]; H01M0006-16 [I,A]; H01M0006-16 [I,C*]; H01M0010-36 [I,C*]; H01M0010-40 [I,A]
	FTERM	5H024/AA01; 5H024/AA02; 5H024/AA07; 5H024/AA12;

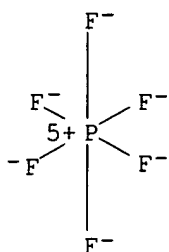
5H024/BB09; 5H024/CC02; 5H024/CC12; 5H024/FF14;
 5H024/FF15; 5H024/FF16; 5H024/FF17; 5H024/FF18;
 5H024/FF19; 5H024/FF20; 5H024/FF31; 5H024/HH08;
 5H029/AJ03; 5H029/AJ05; 5H029/AK02; 5H029/AK03;
 5H029/AK05; 5H029/AL01; 5H029/AL02; 5H029/AL12;
 5H029/AM02; 5H029/AM03; 5H029/AM04; 5H029/AM05;
 5H029/AM06; 5H029/AM07; 5H029/BJ02; 5H029/BJ14;
 5H029/HJ02; 5H029/HJ10; 5H050/AA07; 5H050/AA08;
 5H050/BA06; 5H050/BA16; 5H050/CA02; 5H050/CA08;
 5H050/CA09; 5H050/CA11; 5H050/CB01; 5H050/CB02;
 5H050/CB12; 5H050/EA10; 5H050/EA24; 5H050/FA05;
 5H050/HA02; 5H050/HA10

AB The electrolyte solution has an active O containing compound The battery has a
 cathode, an anode, and the above electrolyte solution
 ST secondary lithium battery electrolyte active oxygen contg compd
 IT Battery electrolytes
 (electrolyte solns. containing oxy radical compds. for secondary
 lithium batteries)
 IT 96-49-1, Ethylene carbonate 105-58-8, Diethyl carbonate 7782-42-5,
 Graphite, uses 12668-36-9 14283-07-9, Lithium
 tetrafluoroborate 21324-40-3, Lithium
 hexafluorophosphate 37292-50-5 39286-52-7 90076-65-6
 132843-44-8
 RL: DEV (Device component use); USES (Uses)
 (electrolyte solns. containing oxy radical compds. for secondary
 lithium batteries)
 IT 2370-18-5 2525-39-5 2700-36-9 4647-83-0 103760-32-3 849413-43-0
 RL: MOA (Modifier or additive use); USES (Uses)
 (electrolyte solns. containing oxy radical compds. for secondary
 lithium batteries)
 IT 14283-07-9, Lithium tetrafluoroborate 21324-40-3
 , Lithium hexafluorophosphate 39286-52-7
 90076-65-6 132843-44-8
 RL: DEV (Device component use); USES (Uses)
 (electrolyte solns. containing oxy radical compds. for secondary
 lithium batteries)
 RN 14283-07-9 HCAPLUS
 CN Borate(1-), tetrafluoro-, lithium (8CI, 9CI) (CA INDEX NAME)



● Li⁺

RN 21324-40-3 HCAPLUS
 CN Phosphate(1-), hexafluoro-, lithium (8CI, 9CI) (CA INDEX NAME)



● Li⁺

RN 39286-52-7 HCAPLUS

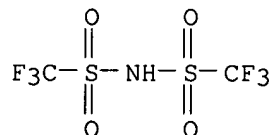
CN Cobalt alloy, nonbase, Co,Sn (9CI) (CA INDEX NAME)

Component	Component Registry Number
-----------	------------------------------

=====+=====	
Co	7440-48-4
Sn	7440-31-5

RN 90076-65-6 HCAPLUS

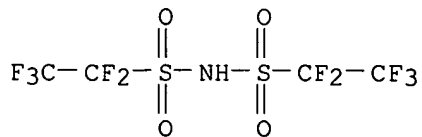
CN Methanesulfonamide, 1,1,1-trifluoro-N-[(trifluoromethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

RN 132843-44-8 HCAPLUS

CN Ethanesulfonamide, 1,1,2,2,2-pentafluoro-N-[(pentafluoroethyl)sulfonyl]-,
lithium salt (9CI) (CA INDEX NAME)



● Li

L101 ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN

jan delaval - 10 october 2006

AN 2001:691889 HCAPLUS
 DN 135:229387
 ED Entered STN: 21 Sep 2001
 TI Battery with nonaqueous electrolyte and improved anode active material
 IN Inagaki, Hiroki; Takami, Norio
 PA Kabushiki Kaisha Toshiba, Japan
 SO Eur. Pat. Appl., 12 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 IC ICM H01M0004-38
 ICS H01M0004-46; H01M0004-48; H01M0004-58
 CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)
 Section cross-reference(s): 56

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 1134824	A2	20010919	EP 2001-302081	20010307
	EP 1134824	A3	20031029		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	US 2001046629	A1	20011129	US 2001-797883	20010305
	US 6686090	B2	20040203		
	JP 2001332253	A2	20011130	JP 2001-72061	20010314
	JP 3648458	B2	20050518		
	CN 1313645	A	20010919	CN 2001-111478	20010315
PRAI	JP 2000-72377	A	20000315		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 1134824	ICM	H01M0004-38
	ICS	H01M0004-46; H01M0004-48; H01M0004-58
	IPCI	H01M0004-38 [ICM,6]; H01M0004-46 [ICS,6]; H01M0004-48 [ICS,6]; H01M0004-58 [ICS,6]
	IPCR	H01M0004-38 [I,C*]; H01M0004-38 [I,A]; H01M0004-46 [I,C*]; H01M0004-46 [I,A]
US 2001046629	IPCI	H01M0004-40 [ICM,7]; H01M0004-58 [ICS,7]; H01M0004-62 [ICS,7]
	IPCR	H01M0004-38 [I,A]; H01M0004-38 [I,C*]; H01M0004-46 [I,A]; H01M0004-46 [I,C*]
	NCL	429/231.900; 429/217.000; 429/218.100; 429/221.000; 429/223.000
JP 2001332253	IPCI	H01M0004-38 [ICM,7]; H01M0004-02 [ICS,7]; H01M0010-40 [ICS,7]; H01M0010-36 [ICS,7,C*]
	IPCR	H01M0010-36 [I,C*]; H01M0010-40 [I,A]; H01M0004-02 [I,C*]; H01M0004-02 [I,A]; H01M0004-38 [I,C*]; H01M0004-38 [I,A]
CN 1313645	IPCI	H01M0004-38; H01M0004-62; H01M0010-36
	IPCR	H01M0004-38 [I,C*]; H01M0004-38 [I,A]; H01M0004-46 [I,C*]; H01M0004-46 [I,A]

AB The development of a new anode material led to the provision of a battery with nonaq. electrolyte which has a combination of a high discharge capacity with excellent cycling characteristics. The battery with nonaq. electrolyte comprises: a cathode and an anode having an anode active material capable of occluding and releasing an alkali metal. The anode active material contains ≥ 1 element selected from the group consisting of Group 4B elements and Group 5B elements and has ≥ 1 crystal structure selected from the group consisting of BiF₃ structure, Cu₂MnAl structure, and AgAsMg structure. The anode active material contains ≥ 1 element selected from the group consisting of Al, Si,

Ge, Sn, P, Sb, and Bi and has ≥ 1 crystal structure selected from the group consisting of BiF₃ structure, Cu₂MnAl structure, and AgAsMg structure.

ST anode battery nonaq electrolyte

IT Battery anodes
Secondary batteries
(battery with nonaq. electrolyte and improved anode active material)

IT Alkali metals, uses
Group IVB elements
Group VB elements
RL: DEV (Device component use); USES (Uses)
(battery with nonaq. electrolyte and improved anode active material)

IT Carbon black, uses
RL: MOA (Modifier or additive use); USES (Uses)
(battery with nonaq. electrolyte and improved anode active material)

IT Fluoro rubber
Fluoropolymers, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(binder; battery with nonaq. electrolyte and improved anode active material)

IT Synthetic rubber, uses
RL: TEM (Technical or engineered material use); USES (Uses)
(butadiene-ethylene, binder; battery with nonaq. electrolyte and improved anode active material)

IT 96-49-1, Ethylene carbonate 623-53-0, Ethyl methyl carbonate
7429-90-5, Aluminum, uses 7440-21-3, Silicon, uses **7440-31-5**,
Tin, uses 7440-36-0, Antimony, uses 7440-56-4, Germanium, uses
7440-69-9, Bismuth, uses 7723-14-0, Phosphorus, uses 11056-42-1
11118-07-3 12003-42-8 12023-54-0, Iron silicide (Fe₃Si) 12032-71-2
12059-23-3 12133-96-9 12163-59-6, Manganese silicide (Mn₃Si)
12190-79-3, Cobalt lithium oxide colio2 12423-44-8
12502-69-1 12526-54-4 12526-55-5 12534-03-1 **21324-40-3**,
Lithium hexafluorophosphate 60968-66-3 66590-17-8
75349-09-6 99787-36-7 105110-44-9 149571-46-0 149571-49-3
359783-12-3 359783-13-4 359783-14-5 359783-15-6 359783-16-7
359783-17-8, Antimony manganese nickel phosphide (Sb_{0.8}MnNi₂P_{0.2})
359783-18-9, Antimony cobalt manganese phosphide (Sb_{0.8}Co₂MnP_{0.2})
359783-19-0 359783-20-3 359783-21-4, Nickel tin titanium silicide
(NiSn_{0.8}TiSi_{0.2}) 359783-22-5, Cobalt tin titanium silicide
(CoSn_{0.8}TiSi_{0.2}) 359783-23-6 359783-24-7 **359783-25-8**
359783-26-9
RL: DEV (Device component use); USES (Uses)
(battery with nonaq. electrolyte and improved anode active material)

IT 7782-42-5, Graphite, uses
RL: MOA (Modifier or additive use); USES (Uses)
(battery with nonaq. electrolyte and improved anode active material)

IT 9002-84-0, Ptfе 9004-32-4, Cmc 24937-79-9, Pvdф
RL: TEM (Technical or engineered material use); USES (Uses)
(binder; battery with nonaq. electrolyte and improved anode active material)

IT **7440-31-5**, Tin, uses **12190-79-3**, Cobalt lithium
oxide colio2 **21324-40-3**, **Lithium** hexafluorophosphate
75349-09-6 **359783-25-8** **359783-26-9**
RL: DEV (Device component use); USES (Uses)
(battery with nonaq. electrolyte and improved anode active material)

RN 7440-31-5 HCAPLUS

CN Tin (8CI, 9CI) (CA INDEX NAME)

Sn

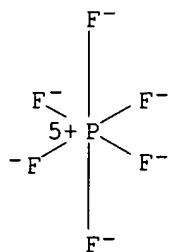
RN 12190-79-3 HCAPLUS

CN Cobalt lithium oxide (CoLiO₂) (9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
O	2	17778-80-2
Co	1	7440-48-4
Li	1	7439-93-2

RN 21324-40-3 HCAPLUS

CN Phosphate(1-), hexafluoro-, lithium (8CI, 9CI) (CA INDEX NAME)

● Li⁺

RN 75349-09-6 HCAPLUS

CN Cobalt, compd. with tin (3:1) (7CI, 9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
Co	3	7440-48-4
Sn	1	7440-31-5

RN 359783-25-8 HCAPLUS

CN Antimony, compd. with lithium, manganese and nickel (1:1:1:2) (9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
Sb	1	7440-36-0
Ni	2	7440-02-0
Mn	1	7439-96-5
Li	1	7439-93-2

RN 359783-26-9 HCAPLUS

CN Antimony, compd. with cobalt, lithium and manganese (1:2:0.1:1) (9CI) (CA INDEX NAME)

Component	Ratio	Component
-----------	-------	-----------

		Registry Number
Co	2	7440-48-4
Sb	1	7440-36-0
Mn	1	7439-96-5
Li	0.1	7439-93-2

L101 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2006 ACS on STN

AN 1998:804120 HCAPLUS

DN 130:54847

ED Entered STN: 23 Dec 1998

TI Anode materials for secondary nonaqueous-electrolyte batteries and batteries using these materials

IN Shimamura, Harunari; Okamura, Kazuhiro; Nitta, Yoshiaki

PA Matsushita Electric Industrial Co., Ltd., Japan

SO Eur. Pat. Appl., 25 pp.

CODEN: EPXXDW

DT Patent

LA English

IC ICM H01M0004-40

ICS H01M0004-36; H01M0004-02

CC 52-2 (Electrochemical, Radiational, and Thermal Energy Technology)

FAN.CNT 7

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 883199	A1	19981209	EP 1998-110110	19980603
	EP 883199	B1	20030507		
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
	JP 2000030703	A2	20000128	JP 1998-150966	19980601
	HK 1015550	A1	20030905	HK 1999-100282	19990121
PRAI	JP 1997-144873	A	19970603		
	JP 1998-123199	A	19980506		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
EP 883199	ICM	H01M0004-40
	ICS	H01M0004-36; H01M0004-02
	IPCI	H01M0004-40 [ICM,6]; H01M0004-36 [ICS,6]; H01M0004-02 [ICS,6]
	IPCR	H01M0004-02 [I,C*]; H01M0004-02 [I,A]; H01M0004-36 [I,C*]; H01M0004-36 [I,A]; H01M0004-40 [I,C*]; H01M0004-40 [I,A]
JP 2000030703	ECLA	H01M004/02B; H01M004/36; H01M004/40
	IPCI	H01M0004-38 [ICM,7]; H01M0004-02 [ICS,7]; H01M0004-40 [ICS,7]; H01M0004-46 [ICS,7]; H01M0004-58 [ICS,7]; H01M0010-40 [ICS,7]; H01M0010-36 [ICS,7,C*]
	IPCR	H01M0004-02 [I,A]; H01M0004-02 [I,C*]; H01M0004-38 [I,A]; H01M0004-38 [I,C*]; H01M0004-40 [I,A]; H01M0004-40 [I,C*]; H01M0004-46 [I,A]; H01M0004-46 [I,C*]; H01M0004-58 [I,A]; H01M0004-58 [I,C*]; H01M0010-36 [I,C*]; H01M0010-40 [I,A]
HK 1015550	IPCI	H01M [ICM,7]
	IPCR	H01M0004-02 [I,C*]; H01M0004-02 [I,A]; H01M0004-36 [I,C*]; H01M0004-36 [I,A]; H01M0004-40 [I,C*]; H01M0004-40 [I,A]

AB The composite title materials comprise a core formed by a solid phase A, and a solid phase Q partly or entirely wrapping the core. The amount of Li intercalation and deintercalation by the phase A resulting from

the charge and discharge is higher than that by the phase Q, however, the discharge capacity decrease of the phase Q resulting from battery cycling is low. The solid phase A comprises 1 of the materials selected from Li, ≥ 1 of the elements which is able to alloy with Li, solid solution including ≥ 1 of the above elements being able to alloy with Li, or an intermetallic compound including ≥ 1 of the above elements being able to alloy with Li. The solid phase Q has a different composition, but comprises the same kind of materials except Li by itself as those of the solid phase A. It is essential that the solid phase Q is a mixed conductor having electronic as well as Li ionic conductivity. When these materials are used in the anode, a secondary nonaq.-electrolyte battery can be realized featuring high reliability, high cycle characteristic, a high capacity, and excellent high-rate charge and discharge characteristics.

ST anode composite material nonaq electrolyte battery

IT Battery anodes

(composite materials for secondary nonaq.-electrolyte)

IT 7439-93-2, **Lithium**, uses

RL: DEV (Device component use); USES (Uses)

(in composite anodes for secondary nonaq.-electrolyte batteries)

IT 7439-98-7, Molybdenum, uses 7440-21-3, Silicon, uses 12057-22-6

, LiZn 12338-02-2 12359-06-7 12372-42-8,

InLi 12588-27-1 12606-83-6 12625-55-7 12635-26-6

12719-97-0 12779-78-1 37201-99-3 37254-87-8 37345-56-5

39328-55-7 42616-53-5 52359-88-3 53550-31-5 53680-56-1

54739-65-0 54966-99-3 55823-21-7 56095-13-7 57896-14-7

57952-74-6 58817-42-8 58817-44-0 60224-91-1 65467-06-3, Barium

alloy, Ba 56, Al 44 66758-27-8 67661-05-6 67828-86-8

68714-90-9 72048-17-0 73730-53-7 73990-63-3 74662-93-4

77325-33-8 78966-19-5 79818-26-1 80507-64-8 81754-08-7

81876-77-9 81876-81-5 82906-17-0 85746-90-3 87646-31-9

90738-65-1 96958-82-6 100502-97-4 101406-54-6 110109-09-6

110414-25-0 110633-84-6 112787-78-7 113470-14-7 114016-83-0

117816-43-0 118035-89-5 119281-87-7 119469-25-9 122381-65-1

126034-61-5 127706-34-7 128491-68-9 128491-69-0 131082-81-0

137747-27-4 140154-87-6 142536-01-4 145604-95-1

147856-99-3 148844-98-8 155759-82-3 158140-18-2 172919-16-3

173790-72-2 198958-08-6 204000-16-8 217074-33-4 217074-37-8

217074-44-7 217074-48-1 217074-51-6 217074-53-8 217074-57-2

217074-65-2 217074-68-5 217074-71-0 217074-75-4 217075-09-7

217075-12-2 217075-19-9 217075-21-3 217075-23-5 217075-26-8

217075-28-0 217075-30-4 217075-34-8 217075-38-2 217075-39-3

217075-40-6 217075-41-7 217075-42-8 217075-43-9 217075-44-0

217075-45-1 217075-46-2 217075-47-3 217075-48-4 217075-49-5

217075-50-8 217075-51-9 217075-52-0 217075-53-1 217075-54-2

217075-55-3 217075-56-4 217075-57-5 217075-58-6 217075-59-7

217075-61-1 217075-62-2 217075-63-3 217075-64-4 217075-65-5

RL: DEV (Device component use); PRP (Properties); USES (Uses)

(in composite anodes for secondary nonaq.-electrolyte batteries)

IT 79933-53-2P 126500-61-6P 169217-08-7P 217075-66-6P

RL: DEV (Device component use); SPN (Synthetic preparation); PREP

(Preparation); USES (Uses)

(in composite anodes for secondary nonaq.-electrolyte batteries)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Hope Techn Inc; EP 0693568 A 1996 HCAPLUS

(2) Huggins, R; US 4950566 A 1990 HCAPLUS

(3) Le Mehaute, A; US 4495258 A 1985 HCAPLUS

(4) McManis, G; US 4632889 A 1986 HCAPLUS

IT 7439-93-2, **Lithium**, uses

RL: DEV (Device component use); USES (Uses)
(in composite anodes for secondary nonaq.-electrolyte batteries)

RN 7439-93-2 HCAPLUS

CN Lithium (7CI, 8CI, 9CI) (CA INDEX NAME)

Li

IT 12057-22-6, LiZn 12338-02-2 12359-06-7

12372-42-8, InLi 12588-27-1 56095-13-7

67828-86-8 78966-19-5 82906-17-0

142536-01-4

RL: DEV (Device component use); PRP (Properties); USES (Uses)
(in composite anodes for secondary nonaq.-electrolyte batteries)

RN 12057-22-6 HCAPLUS

CN Lithium, compd. with zinc (1:1) (9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
Zn	1	7440-66-6
Li	1	7439-93-2

RN 12338-02-2 HCAPLUS

CN Bismuth, compd. with lithium (1:3) (6CI, 9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
Bi	1	7440-69-9
Li	3	7439-93-2

RN 12359-06-7 HCAPLUS

CN Lithium, compd. with tin (4:1) (6CI, 9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
Sn	1	7440-31-5
Li	4	7439-93-2

RN 12372-42-8 HCAPLUS

CN Indium, compd. with lithium (1:1) (7CI, 8CI, 9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
In	1	7440-74-6
Li	1	7439-93-2

RN 12588-27-1 HCAPLUS

CN Aluminum, compd. with lithium (1:2) (6CI, 9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
Li	2	7439-93-2
Al	1	7429-90-5

RN 56095-13-7 HCAPLUS

CN Lead, compd. with lithium (1:4) (6CI, 9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
Li	4	7439-93-2
Pb	1	7439-92-1

RN 67828-86-8 HCAPLUS

CN Tin alloy, base, Sn 80,Co 20 (9CI) (CA INDEX NAME)

Component	Component Percent	Component Registry Number
Sn	80	7440-31-5
Co	20	7440-48-4

RN 78966-19-5 HCAPLUS

CN Tin alloy, base, Sn 67,Co 33 (9CI) (CA INDEX NAME)

Component	Component Percent	Component Registry Number
Sn	67	7440-31-5
Co	33	7440-48-4

RN 82906-17-0 HCAPLUS

CN Cadmium, compd. with lithium (1:3) (9CI) (CA INDEX NAME)

Component	Ratio	Component Registry Number
Cd	1	7440-43-9
Li	3	7439-93-2

RN 142536-01-4 HCAPLUS

CN Titanium alloy, base, Ti 80,Li 20 (9CI) (CA INDEX NAME)

Component	Component Percent	Component Registry Number
Ti	80	7440-32-6
Li	20	7439-93-2

=> sel hit rn

HIGHEST E# ASSIGNED. SELECT NOT VALID.

You cannot assign more values to E#s because the maximum E# has been reached. Enter "DELETE SELECT" to remove all E# assignments. The next SELECT command will begin again with E1.

=> => d ide can tot l112

L112 ANSWER 1 OF 8 REGISTRY COPYRIGHT 2006 ACS on STN

RN 78966-19-5 REGISTRY

ED Entered STN: 16 Nov 1984

CN Tin alloy, base, Sn 67,Co 33 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Cobalt 50, tin 50 (atomic)
 MF Co . Sn
 CI AYS
 LC STN Files: CA, CAPLUS, USPATFULL

Component	Component Percent	Component Registry Number
Sn	67	7440-31-5
Co	33	7440-48-4

11 REFERENCES IN FILE CA (1907 TO DATE)
 11 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 145:317946
 REFERENCE 2: 135:52699
 REFERENCE 3: 134:303577
 REFERENCE 4: 133:196882
 REFERENCE 5: 130:54847
 REFERENCE 6: 129:178541
 REFERENCE 7: 125:16304
 REFERENCE 8: 123:262989
 REFERENCE 9: 121:114723
 REFERENCE 10: 110:179699

L112 ANSWER 2 OF 8 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 75349-09-6 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Cobalt, compd. with tin (3:1) (7CI, 9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Tin, compd. with cobalt (1:3)
 MF Co . Sn
 AF Co3 Sn
 CI TIS
 LC STN Files: CA, CAOLD, CAPLUS, USPAT2, USPATFULL

Component	Ratio	Component Registry Number
Co	3	7440-48-4
Sn	1	7440-31-5

8 REFERENCES IN FILE CA (1907 TO DATE)
 8 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 143:390619
 REFERENCE 2: 141:263470
 REFERENCE 3: 135:229387

REFERENCE 4: 134:103240

REFERENCE 5: 110:237804

REFERENCE 6: 109:77838

REFERENCE 7: 106:106532

REFERENCE 8: 93:208671

L112 ANSWER 3 OF 8 REGISTRY COPYRIGHT 2006 ACS on STN

RN **67828-86-8** REGISTRY

ED Entered STN: 16 Nov 1984

CN Tin alloy, base, Sn 80,Co 20 (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Cobalt 33.3, tin 66.7 (atomic)

CN Cobalt 33.4, tin 66.6 (atomic)

MF **Co . Sn**

CI AYS

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

Component	Component Percent	Component Registry Number
=====+=====+=====		
Sn	80	7440-31-5
Co	20	7440-48-4

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

21 REFERENCES IN FILE CA (1907 TO DATE)

21 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 145:317894

REFERENCE 2: 144:394647

REFERENCE 3: 144:334179

REFERENCE 4: 143:443501

REFERENCE 5: 140:393312

REFERENCE 6: 140:238516

REFERENCE 7: 132:351170

REFERENCE 8: 132:210263

REFERENCE 9: 130:54847

REFERENCE 10: 129:178541

L112 ANSWER 4 OF 8 REGISTRY COPYRIGHT 2006 ACS on STN

RN **39286-52-7** REGISTRY

ED Entered STN: 16 Nov 1984

CN Cobalt alloy, nonbase, Co,Sn (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Cobalt alloys, tin- (7CI)

DR 115456-78-5
 MF Co . Sn
 CI AYS
 LC STN Files: CA, CAPLUS, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPAT2,
 USPATFULL

Component	Component Registry Number
Co	7440-48-4
Sn	7440-31-5

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

181 REFERENCES IN FILE CA (1907 TO DATE)
 181 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 145:274916
 REFERENCE 2: 145:274637
 REFERENCE 3: 145:106785
 REFERENCE 4: 145:66291
 REFERENCE 5: 145:11258
 REFERENCE 6: 144:471503
 REFERENCE 7: 144:471416
 REFERENCE 8: 144:471415
 REFERENCE 9: 144:453258
 REFERENCE 10: 144:436123

L112 ANSWER 5 OF 8 REGISTRY COPYRIGHT 2006 ACS on STN
 RN 12526-67-9 REGISTRY
 ED Entered STN: 16 Nov 1984
 CN Cobalt, compd. with tin (3:2) (7CI, 8CI, 9CI) (CA INDEX NAME)
 OTHER CA INDEX NAMES:
 CN Tin, compd. with cobalt (2:3) (8CI)
 MF Co . Sn
 AF Co3 Sn2
 CI TIS
 LC STN Files: CA, CAOLD, CAPLUS, USPAT2, USPATFULL

Component	Ratio	Component Registry Number
Co	3	7440-48-4
Sn	2	7440-31-5

36 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 37 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 1 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 145:107635
 REFERENCE 2: 144:359090
 REFERENCE 3: 144:112035
 REFERENCE 4: 141:263470
 REFERENCE 5: 141:91776
 REFERENCE 6: 140:306707
 REFERENCE 7: 140:238516
 REFERENCE 8: 139:153047
 REFERENCE 9: 139:24815
 REFERENCE 10: 135:213506

L112 ANSWER 6 OF 8 REGISTRY COPYRIGHT 2006 ACS on STN

RN 12394-61-5 REGISTRY

ED Entered STN: 16 Nov 1984

CN Cobalt, compd. with tin (1:2) (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Tin, compd. with cobalt (2:1)

MF Co . Sn

AF Co Sn2

CI TIS

LC STN Files: CA, CAOLD, CAPLUS, USPATFULL

Component	Ratio	Component Registry Number
Co	1	7440-48-4
Sn	2	7440-31-5

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

42 REFERENCES IN FILE CA (1907 TO DATE)

43 REFERENCES IN FILE CAPLUS (1907 TO DATE)

5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 145:317946
 REFERENCE 2: 145:127534
 REFERENCE 3: 145:114142
 REFERENCE 4: 144:316062
 REFERENCE 5: 144:278264
 REFERENCE 6: 143:329165
 REFERENCE 7: 141:192960
 REFERENCE 8: 140:238516

REFERENCE 9: 138:214466

REFERENCE 10: 135:346872

L112 ANSWER 7 OF 8 REGISTRY COPYRIGHT 2006 ACS on STN
RN 12297-65-3 REGISTRY
ED Entered STN: 16 Nov 1984
CN Cobalt, compd. with tin (1:1) (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Tin, compd. with cobalt (1:1)
DR 32695-01-5
MF Co . Sn
AF Co Sn
CI TIS
LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

Component	Ratio	Component Registry Number
Co	1	7440-48-4
Sn	1	7440-31-5

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

56 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
57 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 145:317946

REFERENCE 2: 145:193050

REFERENCE 3: 145:107635

REFERENCE 4: 144:471517

REFERENCE 5: 144:278264

REFERENCE 6: 144:112035

REFERENCE 7: 141:413558

REFERENCE 8: 141:263470

REFERENCE 9: 141:91776

REFERENCE 10: 140:238516

L112 ANSWER 8 OF 8 REGISTRY COPYRIGHT 2006 ACS on STN
RN 7440-31-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN Tin (8CI, 9CI) (CA INDEX NAME)
OTHER NAMES:
CN AT-SN
CN C.I. 77860
CN C.I. Pigment Metal 5
CN Metallic tin
CN Silver Matt Powder
CN Sn-HWQ

CN Sn-S 200
CN Sn-S-HWQ
CN SNE 06PB
CN TEGO 30
CN TEGO 60
CN Tin element
CN Tin Flake
CN Tin Paste 62-1177
CN Tin Powder
CN Wang
MF Sn
CI COM
LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA,
CABA, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST,
CHEMSAFE, CIN, CSCHM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, ENCOMPLIT,
ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA,
MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT,
USPAT2, USPATFULL, VTB
(*File contains numerically searchable property data)
Other Sources: DSL**, EINECS**, TSCA**
(**Enter CHEMLIST File for up-to-date regulatory information)

Sn

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

95832 REFERENCES IN FILE CA (1907 TO DATE)
7033 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
95921 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 145:327278
REFERENCE 2: 145:327247
REFERENCE 3: 145:326989
REFERENCE 4: 145:326776
REFERENCE 5: 145:326774
REFERENCE 6: 145:326771
REFERENCE 7: 145:326760
REFERENCE 8: 145:326755
REFERENCE 9: 145:326701
REFERENCE 10: 145:326655

=> d l109 ide can tot

L109 ANSWER 1 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN
RN 82906-17-0 REGISTRY
ED Entered STN: 16 Nov 1984
CN Cadmium, compd. with lithium (1:3) (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Lithium, compd. with cadmium (3:1)
MF Cd . Li
AF Cd Li3
CI TIS
LC STN Files: CA, CAPLUS, USPATFULL

Component	Ratio	Component Registry Number
Cd	1	7440-43-9
Li	3	7439-93-2

8 REFERENCES IN FILE CA (1907 TO DATE)
8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:385435
REFERENCE 2: 130:54847
REFERENCE 3: 129:295170
REFERENCE 4: 127:338493
REFERENCE 5: 120:195934
REFERENCE 6: 103:74767
REFERENCE 7: 98:136034
REFERENCE 8: 97:119074

L109 ANSWER 2 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN 14283-07-9 REGISTRY

ED Entered STN: 16 Nov 1984

CN Borate(1-), tetrafluoro-, lithium (8CI, 9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Lithium fluoborate (6CI)

CN Lithium tetrafluoroborate (7CI)

OTHER NAMES:

CN Lithium boridefluoride (LiBF4)

CN Lithium fluoroborate

CN Lithium tetrafluoroborate (LiBF4)

CN Lithium tetrafluoroborate(1-)

DR 12710-06-4

MF B F4 . Li

CI CCS, COM

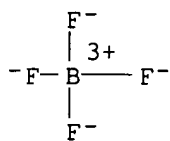
LC STN Files: BIOSIS, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX,
CHEMLIST, CSCHEM, DETHERM*, GMELIN*, IFICDB, IFIPAT, IFIUDB, MEDLINE,
MSDS-OHS, TOXCENTER, USPAT2, USPATFULL

(*File contains numerically searchable property data)

Other Sources: EINECS**, NDSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

CRN (14874-70-5)



● Li⁺

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3298 REFERENCES IN FILE CA (1907 TO DATE)
 47 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 3302 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 8 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 145:318078
 REFERENCE 2: 145:317982
 REFERENCE 3: 145:317962
 REFERENCE 4: 145:317937
 REFERENCE 5: 145:316254
 REFERENCE 6: 145:296168
 REFERENCE 7: 145:296166
 REFERENCE 8: 145:295936
 REFERENCE 9: 145:293762
 REFERENCE 10: 145:283349

L109 ANSWER 3 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN 12372-42-8 REGISTRY

ED Entered STN: 16 Nov 1984

CN Indium, compd. with lithium (1:1) (7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN InLi (6CI)

CN Lithium, compd. with indium (1:1) (8CI)

DR 67759-95-9

MF In . Li

AF In Li

CI TIS

LC STN Files: CA, CAOLD, CAPLUS, IFICDB, IFIPAT, IFIUDB, USPATFULL

Component	Ratio	Component Registry Number
In	1	7440-74-6
Li	1	7439-93-2

49 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 49 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 2 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 144:319037
 REFERENCE 2: 138:307602
 REFERENCE 3: 138:116340
 REFERENCE 4: 138:31201
 REFERENCE 5: 137:206776
 REFERENCE 6: 135:128731
 REFERENCE 7: 134:12672
 REFERENCE 8: 130:54847
 REFERENCE 9: 129:30865
 REFERENCE 10: 120:195934

L109 ANSWER 4 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN 12338-02-2 REGISTRY

ED Entered STN: 16 Nov 1984

CN Bismuth, compd. with lithium (1:3) (6CI, 9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN Lithium, compd. with bismuth (3:1)

OTHER NAMES:

CN Lithium bismuthide (Li3Bi)

DR 64293-10-3

MF Bi . Li

AF Bi Li3

CI TIS

LC STN Files: CA, CAOLD, CAPLUS, CHEMLIST, MSDS-OHS, USPAT2, USPATFULL

Other Sources: EINECS**, NDSL**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

Component	Ratio	Component
		Registry Number
Bi	1	7440-69-9
Li	3	7439-93-2

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

46 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 46 REFERENCES IN FILE CAPLUS (1907 TO DATE)
 9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 140:131130
 REFERENCE 2: 140:114276
 REFERENCE 3: 139:367433

REFERENCE 4: 138:404345
REFERENCE 5: 138:156304
REFERENCE 6: 137:177178
REFERENCE 7: 136:388549
REFERENCE 8: 136:138091
REFERENCE 9: 135:213456
REFERENCE 10: 134:198736

L109 ANSWER 5 OF 5 REGISTRY COPYRIGHT 2006 ACS on STN

RN 7439-93-2 REGISTRY

ED Entered STN: 16 Nov 1984

CN Lithium (7CI, 8CI, 9CI) (CA INDEX NAME)

OTHER NAMES:

CN Lithium atom

CN Lithium element

MF Li

CI COM

LC STN Files: ADISNEWS, AGRICOLA, ANABSTR, AQUIRE, BIOSIS, BIOTECHNO, CA, CABA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX, CHEMLIST, CIN, CSCHM, CSNB, DDFU, DETHERM*, DRUGU, EMBASE, ENCOMPLIT, ENCOMPLIT2, ENCOMPPAT, ENCOMPPAT2, HSDB*, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, MRCK*, MSDS-OHS, PIRA, PROMT, RTECS*, TOXCENTER, TULSA, ULIDAT, USPAT2, USPATFULL, VETU, VTB

(*File contains numerically searchable property data)

Other Sources: DSL**, EINECS**, TSCA**

(**Enter CHEMLIST File for up-to-date regulatory information)

Li

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

82006 REFERENCES IN FILE CA (1907 TO DATE)

7586 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

82078 REFERENCES IN FILE CAPLUS (1907 TO DATE)

5 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

REFERENCE 1: 145:327279
REFERENCE 2: 145:327251
REFERENCE 3: 145:327247
REFERENCE 4: 145:327246
REFERENCE 5: 145:327050
REFERENCE 6: 145:326927
REFERENCE 7: 145:325929

REFERENCE 8: 145:324674

REFERENCE 9: 145:324673


REFERENCE 10: 145:324637

=> d his 148-

(FILE 'HCAPLUS' ENTERED AT 10:04:19 ON 10 OCT 2006)

L48 1 S US20040053131/PN
L49 1 S (US2003-664683# OR JP2002-271710)/AP,PRN
L50 1 S L48,L49
SEL RN

FILE 'REGISTRY' ENTERED AT 10:04:57 ON 10 OCT 2006

L51 21 S E117-E137
L52 7 S L51 AND (CO AND SN)/ELS
E COSN/MF
L53 3 S E3
L54 1 S L53 NOT CCS/CI
E COSN2/MF
L55 2 S E3
L56 1 S L55 NOT SN2C/ES
E CO3SN2/MF
L57 1 S TIN/CN
L58 185 S 7440-48-4/CRN AND 7440-31-5/CRN AND 2/ELC.SUB 
E CO3SN2/MF
L59 1 S E3

FILE 'HCAPLUS' ENTERED AT 10:12:55 ON 10 OCT 2006

L60 5 S L57 AND L56 AND L54 AND L59
SEL RN

FILE 'REGISTRY' ENTERED AT 10:13:46 ON 10 OCT 2006

L61 187 S E1-E187
L62 0 S L61 AND LI/ELS
L63 21 S L51 AND L61

FILE 'HCAPLUS' ENTERED AT 10:15:21 ON 10 OCT 2006

L64 526 S L58
L65 74 S L64 AND ?LITHIUM?
L66 36 S L64 AND LI
L67 76 S L65,L66
SEL RN

FILE 'REGISTRY' ENTERED AT 10:15:52 ON 10 OCT 2006

FILE 'HCAPLUS' ENTERED AT 10:15:52 ON 10 OCT 2006
L68 TRA L67 1- RN : 973 TERMS

FILE 'REGISTRY' ENTERED AT 10:15:54 ON 10 OCT 2006

L69 973 SEA L68
L70 59 S L69 AND LI/ELS
L71 54 S L69 AND ?LITHIUM?/CNS
L72 59 S L70,L71

FILE 'HCAPLUS' ENTERED AT 10:16:36 ON 10 OCT 2006

L73 47 S L72 AND L64

FILE 'REGISTRY' ENTERED AT 10:19:50 ON 10 OCT 2006
L74 177 S L61 NOT L58
L75 0 S L74 AND (CO AND SN)/ELS

FILE 'HCAPLUS' ENTERED AT 10:20:44 ON 10 OCT 2006
L76 526 S L56,L65,L59,L58
L77 74 S L76 AND ?LITHIUM?
L78 36 S L76 AND LI
L79 76 S L77,L78
L80 95914 S L57
L81 5567 S L80 AND ?LITHIUM?
L82 3247 S L80 AND LI
L83 6813 S L81,L82
L84 127 S L80 AND L76

FILE 'REGISTRY' ENTERED AT 10:24:59 ON 10 OCT 2006

FILE 'HCAPLUS' ENTERED AT 10:24:59 ON 10 OCT 2006
L85 TRA L84 1- RN : 1284 TERMS

FILE 'REGISTRY' ENTERED AT 10:25:04 ON 10 OCT 2006
L86 1284 SEA L85
L87 20 S L86 AND LI/ELS
L88 19 S L86 AND ?LITHIUM?/CNS
L89 20 S L87,L88
L90 4 S L89 AND (SB OR B)/ELS

FILE 'HCAPLUS' ENTERED AT 10:27:30 ON 10 OCT 2006
L91 4 S L90 AND L84
L92 1 S L91 AND 135:229387/DN
L93 51 S L79 NOT L84

FILE 'REGISTRY' ENTERED AT 10:29:26 ON 10 OCT 2006

FILE 'HCAPLUS' ENTERED AT 10:29:26 ON 10 OCT 2006
L94 TRA L93 1- RN : 672 TERMS

FILE 'REGISTRY' ENTERED AT 10:29:28 ON 10 OCT 2006
L95 672 SEA L94
L96 44 S L95 AND (?LITHIUM?/CNS OR LI/ELS)
L97 5 S L96 AND (IN OR B OR CD OR BI)/ELS
L98 4 S L97 NOT N/ELS

FILE 'HCAPLUS' ENTERED AT 10:31:55 ON 10 OCT 2006
L99 2 S L98 AND L93
L100 3 S L92,L99
L101 3 S L100 AND L50,L60,L73,L76-L84,L91-L93,L99,L100

FILE 'HCAPLUS' ENTERED AT 10:33:54 ON 10 OCT 2006

FILE 'REGISTRY' ENTERED AT 10:34:44 ON 10 OCT 2006

FILE 'HCAPLUS' ENTERED AT 10:34:44 ON 10 OCT 2006
L102 TRA L101 1-3 RN : 194 TERMS

FILE 'REGISTRY' ENTERED AT 10:34:48 ON 10 OCT 2006
L103 194 SEA L102
L104 5 S L103 AND L58,L57,L56,L54,L59
L105 6 S L103 AND L98,L90
L106 16 S L103 AND LI/ELS

L107 15 S L103 AND ?LITHIUM?/CNS
L108 16 S L105-L107
DEL SEL
SEL RN 6 9 11 13 16
L109 5 S E1-E5
L110 4 S L57,L56,L54,L59
L111 4 S L104 NOT L110
L112 8 S L104,L110,L111

=>